ABSTRACT OF DISCLOSURE

Storing parity information in an external storage with multiple disk drives by determining the number of the storage blocks used as data blocks and the number of the storage blocks used as parity blocks; forming a three-dimensional block matrix of virtual data blocks corresponding to the determined number of the storage blocks; allocating virtual parity blocks to the virtual data block planes; allocating the virtual data blocks and the virtual parity blocks to the storage blocks; calculating parity information based upon data bits respectively stored in the storage blocks corresponding to the virtual data blocks of every virtual data block plane; and storing the calculated parity information in the storage blocks corresponding to the virtual parity blocks. The stored parity information allows any number of error blocks to be recovered, and more particularly allow three or more error blocks per one parity group to be recovered.